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ABSTRACT

This evaluation focuses on Title I programs implemented in 26 public and private schools in Community School District 4, a predominantly Hispanic and black district located on Manhattan's upper east side. The various programs examined include: (1) the High Intensity Learning System Reading Program for elementary and junior high grades; (2) the THINK program (comprising reading instruction and language analysis) in junior high schools; and (3) reading, English as a Second Language, and mathematics programs implemented in the six private schools receiving funds. Each program is described in terms of objectives, target population, staffing and strategies. Evaluation procedures are discussed. Findings from observations, interviews, and questionnaires and data on student achievement gains under the different programs are also presented. Appended to the report are copies of observation checklists used in the evaluation, questionnaires administered to teachers and paraprofessionals, and an analysis of the evaluation's historical regression design. (GC)

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AN EVALUATION OF THE 1977-1978 TITLE I ESEA PROGRAM FOR COMMUNITY SCHOOL DISTRICT NO. 4

JULY 1978

OFFICE OF FUNDED PROGRAMS
Carlos M. Medina, Director

Chief Evaluators:

Robert A. Fox
Ted Hurwitz

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AN EVALUATION OF THE 1977-1978 TITLE I ESEA AND IMPACT AID PROGRAMS FOR COMMUNITY SCHOOL DISTRICT NUMBER 4

B/E5039-81652

AN EVALUATION OF A NEW YORK CITY SCHOOL DISTRICT EDUCATIONAL PROJECT FUNDED UNDER TITLE I ESEA OF 1965 (PL 89-10) PERFORMED FOR THE 1977-1978 SCHOOL YEAR.

JULY 1978

Chief Evaluators:

Robert A. Fox
Ted Hurwitz

September 1, 1978

Mr. Carlos M. Medina
Director of Funded Programs
Community School District #4
346 East 117th Street
New York, NY 10035

Dear Mr. Medina:

We are pleased to present the final report of the Evaluation of the Title I ESEA Program for Community School District No. 4 for the 1977-1978 school year.

The conclusions and recommendations presented in this report are the result of extensive analysis of the total data collected including: teacher and paraprofessional questionnaires; observations of learning centers; interviews with principals, coordinators, teachers, paraprofessionals and students; and the raw data collected from the pre and post tests.

We wish to acknowledge the high degree of cooperation extended to the evaluators by the principals, coordinators, teachers, and paraprofessionals in the district.

Special thanks to the Office of Funded Programs, and its staff.

Sincerely,

Robert A. Fox

Ted Hurwitz

CHAPTER I. DESCRIPTION OF THE DISTRICT AND EVALUATION PROGRAM

A. Description of District

Community School District 4 is located on the Upper East Side of Manhattan, between 90th and 120th Streets. Its east-west boundaries are Franklin D. Roosevelt Drive and Fifth Avenue. The ethnic composition of the District is Hispanic, Black and White. Approximately two-thirds of the school population is Hispanic, and one-third is Black. One percent of the population is White.

The 16 elementary schools, 4 junior high and 5 non-public schools in the district receive Title I assistance. These funds are used for the implementation of the High Intensity Learning System (HILS) Reading Program on the elementary level grades 2-6, and in the junior high schools. The junior high schools also have the program THINK. The non-public schools utilize their funds for reading, English as a second language and mathematics programs. Each compoment will be discussed and analysed in Chapter II. The schools receiving assistance under Title I are as follows:

Elementary Schools - 7, 50, 57, 72, 83, 96, 101, 102, 108, 109, 112, 121, 146, 155, 171, 206.

Junior High Schools - 13, 45, 99, 117.

Non-Public Schools - St. Ann, St. Cecilia, St. Lucy, St. Paul, Holy Rosary, Our Lady Queen of Angels. (See Chart I)

B. Description of Program

As stated previously every elementary school participated in the Title I HILS Reading Centers; one for primary grades 3 and 4, the second for elementary grades 5 and 6. Some schools had three centers (P.S. 72, 108, 121, 171, and 206) in order to expand the program to service eligible students in the bilingual centers. Eligible or target students were those who were one or more years below grade level based on the New York City Reading Test given in March 1977.

Four junior high schools participated in the HILS Reading Program, three had a second reading program called THINK. Students who participated in these programs were target students who scored one or more years below grade level in reading. J.H.S. 45 had four HILS Reading Centers, J.H.S. 13 had three, J.H.S. 117 had three and J.H.S. 99 had two. Each of the six non-public schools had a reading center; five had a mathematics center and three had an English As A Second Language (ESL) Center. (See Chart I)

All the above centers were observed at least once by the evaluators using a Center Observation Check List

(appendix I). The evaluators also attended a District-Wide Advisory Meeting, a Center Teacher Meeting led by Ms. Loyda Alfalla, a Program Paraprofessional Meeting led by Mr. Carlos M. Medina and a Non-Public School Paraprofessional Meeting led by Ms. Carol Vericker.

All center teachers were interviewed personally as well as selected paraprofessionals at each center. Students were also spoken with. Each principal was interviewed and urged to submit written recommendations.

A HILS Center Teacher Questionnaire (Appendix III), HILS Paraprofessional Questionnaire (Appendix IV) and a THINK Center Teacher and Paraprofessional Questionnaire (Appendix V) were distributed to all junior high schools and returned.

The statistical analysis per component followed a New York State approved Historical Regression Analysis (See Appendix VI). This is a pre and post test means difference using the significance of the difference between the predicted and actual post test scores (by grade). A correlated t-test was used with the level of significance at p___.05

All evaluative work followed the evaluation design of each component.

C. Program Changes from 1976-1977

The district responded to the 1976-1977 recommendations by appointing Warren Balsam and Beatrice Ramirez-Epstein as Reading Coordinators, their backgrounds in teaching and administration at the junior high school level proved invaluable experience for this position. During the 1977-1978 school year the two coordinators were able to accomplish the following:

- Visit each elementary HILS and GERIS Center and junior high school HILS, THINK, and GERIS Center a minimum of three times.
- Chair monthly HILS teachers' meetings.
- Organize and supervise pre and post reading tests for elementary and junior high schools.
- Chair the HILS Revision Committee.
- Attend two New York State seminars on reading.
- Purchase all the new materials for all programs.
- Supervise paraprofessional trainer.
- Attend five Parents' Advisory council meetings.
- Attend three District School Board meetings.

In addition, the district made the following changes:

1. The THINK program in all but one junior high school was consolidated so that both the language analysis and developmental reading components were taught by the same teacher.
2. All Title I reading programs placed special emphasis on comprehension.

3. A Paraprofessional trainer was appointed in February 1978. From February to the end of the school year Ms. Pat Piro, the paraprofessional trainer, held workshops two to four times a week in the district elementary and junior high schools.

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CHART 1

COMPONENT	PARTICIPATING SCHOOLS	GRADES	ESTIMATED TARGET POPULATION	ACTUAL FINAL EVALUATED POPULATION*
HIGH INTENSITY READING ELEMENTARY SCHOOLS (39-81652)	7,50,57,72,83, 96,101,102,108, 109,112,121,146 155,171,206	2	130	114
		3	443	315
		4	598	481
		5	732	575
		6	650	591
		TOTAL	2553	2076
HIGH INTENSITY READING	13,45,109,99,117	7	786	761
		8	853	764
		9	438	322
		TOTAL	2077	1847
NON-PUBLIC SCHOOLS READING & MATHEMATICS (39-81653)	St. ANN, St. CECILIA, St. LUCY, St. PAUL, (reading only), HOLY ROSARY, OUR LADY QUEEN OF ANGELS	2	43	41
		3	61	58
		4	59	57
		5	64	63
		6	56	55
		7	49	44
		8	29	19
		TOTAL	361	337
NON-PUBLIC SCHOOLS ENGLISH AS A SECOND LANGUAGE (39-81654)	St. CECILIA, St. PAUL, OUR LADY QUEEN OF ANGELS	K	16	15
		1	65	61
		2	35	33
		3	16	16
		4	13	13
		TOTAL	145	138

*DIFFERENCE BETWEEN SERVICED POPULATION AND TOTAL CORRELATED POPULATION DUE TO ABSENTEEISM OR TRANSFERS.

CHAPTER II. EVALUATION OF PROGRAM COMPONENTS

A. High Intensity Reading Program in the Public Elementary Schools Grades 2 - 6 (5039-81652)

1. Description

The High Intensity Learning Systems (HILS) Reading Program comprised the single largest component under the Title I Umbrella. In the sixteen District 4 public elementary schools (See Chart I), HILS was staffed by 36 teachers, 188 paraprofessionals, 2 reading coordinators and serviced a total of 2,553 target students covering grades 2 - 6. The target group represented students one or more years behind in reading grade level.

HILS Reading Program has two basic components and is designed as a remedial supplement to a regular language arts curriculum. The first component is a collection of reading and programmed drill materials from more than fifty different publishers including trade books, kits, audio-visual materials and workbooks set in a warm, attractive environment called the HILS Reading Center. The second component is the classroom management system designed to help the center teacher make diagnostic decisions about a student's reading, by providing the behavioral analysis the teacher needs for assessments. With the Catalogue of Instructional Objectives and Prescriptions, the management system provides appropriate prescriptions for instruction

for each student based on these assessments. It also provides classroom management strategies and resources so that one teacher can operate as many individual curricula as there are students in the class.

Each student is tested at the beginning of the year with several diagnostic reading instruments. Based on results of these tests the student is given an individualized program that best suits his reading needs. The student receives his own record form with appropriate prescriptions of instructional objectives that enable him to locate his own working material. Target students work either alone or in small groups of four or five with a paraprofessional. The paraprofessional provide whatever guidance, reinforcement and support the student requires. Non-target students work with the regular tax levy classroom teacher.

The prescriptions are individualized, programmed lessons in 4 basic areas: word analysis, vocabulary, omprehension and study skills. The prescriptions also include "open-ended" assignments in which students read books independently. Other prescriptions require the student to complete exercises in a workbook or kit, listen to a tape, work with the "Systems 80" machine or play an educational game. Prescriptions are designed to provide as much motivation as possible while accomplishing their instructional objectives.

Minitests, called check in or check out tests, are self-administered at regular intervals and checked by the paraprofessional and teacher to provide a check of student's progress.

In summary, the HILS Reading Program is a supplementary remedial reading system designed to identify individual reading difficulties and provide diversified, individualized instruction that is highly motivating to the student.

2. Evaluation Procedures

The evalution of HILS Reading Program was based on findings from:

- Center observations
- Interviews with principals, center teachers, paraprofessionals and students
- Pre-Post test results

The statistical criterion used for HILS Reading Component stated that participants would demonstrate pre/post test gains at the $p < .05$ significance level.

To determine whether treatment (participation in HILS Reading Program) produced significant mean growth for the participants, the New York State approved Historical Regression Analysis (See Appendix IV) was used for each of the five (5) grades participating in the program.

The Historical Regression technique establishes a predicted post test score per participant. The method for calculating the Predicted Post Test Score (PPTS) is based on the formula issues by the New York State Education Department in the District Evaluators Handbook of Selected Evaluation Procedures for Categorically Aided Programs Serving Disadvantaged Learners, reprint 1974, pages 28-31.

$$PPTS = \frac{G.E. - 1}{\#\text{ months in school}} \times \text{treatment months} + G.E.$$

PPTS = Predicted Post Test Score

months in school = 10 for 2nd grade, 20 for 3rd grade, etc.

G.E. = Grade Equivalent Score on pre-test

Treatment Months = number of months between pre post test

It was expected that second through sixth grade participants mean grade equivalent test scores would be significantly greater than the mean scores which would have been attained if the students had received no treatment (not selected to participate in the program). Students chosen were one year or more below grade level.

The mean difference (actual post to predicted post test) scores were analyzed using a t-test for correlated means at the .05 level of significance. (p. 31 of the District Evaluator's Handbook of Selected Evaluation Procedures for Categorically Aided Programs Serving Disadvantaged Learners, 1974).

The t - statistic formula used was:

$$t = \frac{d}{\sqrt{\frac{N(\ d^2) - (\ d)^2}{N - 1}}}$$

N = Number of participating students

d = Difference between the PPTS and the actual post test score.

The table used to determine the critical value of t can be found in Statistical Analysis in Psychology and Education, 2nd edition by George Ferguson, McGraw Hill Book Company, 1966, p. 406.

The following tables will show the Historical Regression Analysis Summaries by grade for total reading and comprehension. The statistics are only for those students with pre and post test grades.

The difference between the initial target population and those with pre and post test scores is due to students who either transferred from the district or were absent during testing.

3. Findings from Observations, Interviews and Questionnaires

Each public elementary school HILS reading center was visited by an evaluator during the school year (See Appendix I, Center Observation). At this time, each principal, and center teacher and randomly selected paraprofessionals and students were interviewed.

a. Center Observations and Interviews with Principals, Center Teachers, Paraprofessionals and Students

Each HILS Reading Center adhered to the Title I guidelines for the program. The centers contained the following prescribed areas: reading corner, workbooks, kits, poetry, games, audio and management. The rooms were further decorated with cartoons, photographs, articles, instructional material, special awards, achievement charts and individual student's work to create a stimulating learning environment.

The students appeared to enjoy the HILS system of learning. Each student, with little or no assistance, would enter the center, find the prescription he was working on, and begin working. Students worked in small groups with a paraprofessional. The rapport between the students and paras was good. The teacher's role was an overall manager, however, when the occasion warranted, the teacher taught special lessons to groups.

The interaction among the teachers, paras and

students was good. Each person in the system had a specific role and the reading periods proceeded orderly. The students were particularly motivated by the audio work and reading in the more interesting areas. Sports stories were singularly popular. The paras were able to give the students a great deal of individual attention. This seemed to motivate the students and give them a special pride in their accomplishments. The 4:1 pupil to para ratio was ideal for effective small group functioning and individual help.

Center teachers convened in-service workshops for their paras on an average of once a week. This practice helped maintain a high level of cohesive functioning within each center.

It was observed that having two rooms for each center was beneficial. It provided excellent flexibility for teaching target and non-target students. It also provided for the sequestering of lessons such as book conferences, games and audio exercises, so that other activities could be held in a quieter environment.

While the target students were working on their respective prescriptions, the non-target students of the class also used the center under the direction of the regular (tax-levy) teacher. This was most effective when the regular teacher was well oriented with HILS Reading Program and consulted routinely with the center

teacher as the year progressed. Each reading center contained an enormous amount of reading and other instructional material. It was observed that the paraprofessionals under the supervision of the center teachers did an outstanding job of organizing and maintaining a high degree of order of the vast amount of material. This enabled students to enter the center, find their own record form, locate their appropriate materials for the prescription they were working on and begin work either on their own or in a group.

The elementary school principals took great pride in their respective HILS Reading Programs. They reported that the HILS Reading Program represented one of the most important educational aspects of their school and the teachers assigned were of the highest caliber they had to offer. The District Office was unanimously praised as cooperative and supportive in every possible way. Most principals indicated they take an active role in overseeing the functioning of HILS. Several principals emphasized the value of HILS in teaching students to be independent, self-starting and self-directing.

Students interviewed indicated that they looked forward to their time in the HILS Reading Center. They liked working on their own and receiving individual attention. The students suggested that more material relating to sports, hobbies and travel were needed. All students

interviewed indicated they thought the HILS Reading Program was effective and the center teachers and paraprofessionals did a good job.

Major criticism of HILS centered around the management system and the role of the center teacher. The program is highly structured and management oriented. Practically all of the teacher's time is spent prescribing instructional objectives and managing the system. Many students, paras and teachers suggested a streamlining of the program to allow more flexibility in its functioning. Many instructional objectives could be deleted or consolidated freeing teachers to give lessons in difficult to learn areas. In addition, the center teacher should work at least one day a week with each group.

Reading pretests were not administered for the 1977-78 school year until November. This late administarion of the tests can confound the reliability and validity of the pre-post test statistical results. Because the pre-tests were so late, part of the pre-test gains are actually the result of 1977-78 academic work. This artificiality elevates the pre-test score from what it would have been, had the test been administered in September or early October. It would also be noted that students returning from the summer recess tend to be more highly motivated than later in the year. For this reason, many experts are of the opinion that appreciable reading gains are made during the first two months of the adacemic year.

4. Pre-Post Findings - Grade 2-6

Second Grade - Table 1

For the second graders a pre-post test comparison was made because many of the pre-test scores were below 1.0 and the Historical Regression could not be used.

The total reading gain was more than one year which was deemed highly significant. The comprehension pre-test mean of 1.08 was lower than the total reading pre-test mean of 1.25 and the decision to concentrate on comprehension during treatment helped the target children to do better than one year and one month gain. This was also highly significant and both gains make it highly likely that the gains were due to program participation.

Third Grade - Table 2

At the beginning of the term these target children were more than a year below grade in both total reading and comprehension. The predicted growth based on their history was two months. In reality these children gained more than four times that figure (8 months) in both total reading and comprehension which is highly significant, better than the .0005 level. This signifies that the possibility of these gains happening by chance is only five times in ten thousand and therefore it is highly likely once more that program intervention helped cause the gains.

Fourth Grade - Table 3

The fourth graders as a whole started more than one and one-half years below grade level in both total reading and comprehension and their predicted gain without special program assistance was two months. The actual gains were just under seven months in comprehension and just over five months in total reading.

These gains were again significant and the chances that program assistance helped cause the gain is great.

Fifth Grade - Table 4

In the fifth grade the pre-test means for total reading and comprehension show the target student more than two years below grade. Progressive retardation is setting in with these disadvantaged students.

Had the target children not participated in the program their predicted gain was approximately three months. The actual gains were a remarkable one year and three months in both total reading and comprehension. These are highly significant gains and the chances are that this could happen without program intervention is only five times in ten thousand.

Sixth Grade - Table 5

The pre-test mean for these sixth graders was just below fourth grade in comprehension and just above

fourth grade in total reading

The predicted growth for these students was three and one-half months had they not participated in any specialized program.

The actual growth was better than eight months in comprehension and better than nine months in total reading.

When the t-test for correlated means was applied using the predicated mean and the actual post-test mean a t-value was obtained signifying that the increased growth of the participants could have only happened by chance less than five times in ten thousand and therefore, it is highly probable that participation in the program caused the successful growth in both comprehension and total reading.

Composite Findings - Table 6

The more than one year's growth in total reading and comprehension was highly significant in the second grade.

At all grade levels (3-6) the post-test means exceeded the predicted means with an extremely high level of significance - better than .0005 which exceeded our success criterion of .05. Therefore, we conclude that these gains come about due to participation in the High Intensity Reading Program.

With the gains at close to or above one year at each grade level, there is a strong possibility that the HILS Reading Program can help stem the tide of progressive reading retardation for the target population.

TABLE 1

PRE-POST TEST ANALYSIS SUMMARY

HIGH INTENSITY READING PROGRAM

GRADE 2

	PRE-TEST MEAN	POST-TEST MEAN	MEAN GROWTH POST-TEST PRE-TEST	t-VALUE	p-VALUE
TOTAL READING	1.25	2.34	1.09	34.89	.0005
COMPRE-HENSION	1.08	2.20	1.12	14..6	.0005

TABLE 2

HISTORICAL REGRESSION ANALYSIS SUMMARY

HIGH INTENSITY READING PROGRAM

GRADE 3

N-315	PRE-TEST MEAN	PREDICTED MEAN	POST-TEST MEAN	PREDICTED GROWTH	MEAN GROWTH POST-TEST PRE-TEST	t-VALUE p-VALUE
TOTAL READING	1.70	1.91	2.51	.21	.81	17.05 $<$.0005
COMPRE-HENSION	1.66	1.86	2.46	.20	.80	15.92 $<$.0005

TABLE 3

HISTORICAL REGRESSION ANALYSIS SUMMARY

HIGH INTENSITY READING PROGRAM

GRADE 4

N = 481	PRE-TEST MEAN	PREDICTED MEAN	POST-TEST MEAN	PREDICTED GROWTH	MEAN GROWTH POST-TEST -PRE-TEST	T-VALUE P-VALUE
TOTAL READING	2.42	2.71	3.16	.29	.74	13.94 <.0005
COMPRE-HENSION	2.47	2.71	2.99	.29	.52	8.05 <.0005

TABLE 4

HISTORICAL REGRESSION ANALYSIS SUMMARY

HIGH INTENSITY READING PROGRAM

GRADE 5

	PRE-TEST MEAN	PREDICTED MEAN	POST-TEST MEAN	PREDICTED GROWTH PREDICTED	MEAN GROWTH POST-TEST -PRE-TEST	T-VALUE P-VALUE
N = 599						
TOTAL READING	3.05	3.36	4.39	.31	1.34	24.37 <.0005
COMPRE-HENSION	2.89	3.18	4.21	.29	1.32	22.36 <.0005

TABLE 5

HISTORICAL REGRESSION ANALYSIS SUMMARY

HIGH INTENSITY READING PROGRAM

GRADE 6

N = 628	PRE-TEST MEAN	PREDICTED MEAN	POST-TEST MEAN	PREDICTED GROWTH PREDICTED-PRE-TEST	MEAN GROWTH POST-TEST PRE-TEST	T-VALUE P-VALUE
TOTAL READING	4.14	4.48	5.08	.34	.94	22.76 <.0005
COMPRE-HENSION	3.99	4.35	4.81	.36	.82	11.04 <.0005

TABLE 6

HISTORICAL REGRESSION ANALYSIS COMPOSITE
HIGH INTENSITY READING PROGRAM
GRADES 3, 4, 5, 6
AND PRE-POST ANALYSIS GRADE 2

GRADE	TOTAL READ (TR) COMPREHEN-SION (C)	PRE-TEST MEAN	PREDICTED MEAN	POST-TEST MEAN	-N-	T-VALUE	P-VALUE
2	TR	1.25		2.34	114	34.89	.0005
	C	1.08		2.20	114	14.16	.0005
3	TR	1.70	1.91	2.51	315	17.05	.0005
	C	1.66	1.86	2.46	312	15.92	.0005
4	TR	2.42	2.71	3.16	481	13.94	.0005
	C	2.42	2.71	2.99	480	8.05	.0005
5	TR	3.05	3.36	4.39	575	24.37	.0005
	C	2.89	3.18	4.21	599	22.36	.0005
6	TR	4.14	4.48	5.08	591	22.76	.0005
	C	3.99	4.35	4.81	628	11.04	.0005

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5. CONCLUSIONS

a. All HILS Reading Centers adhered to the specifications of the program in terms of learning environment and operational procedures.

b. Professional relationships between center teachers and paraprofessionals were excellent.

c. Rapport between paraprofessionals and students was excellent.

d. In-service workshops on a weekly basis held by individual center teachers for their paraprofessionals was very effective.

e. The system is too management oriented with superfluous instructional objectives and record keeping.

f. A teaching component in traditionally difficult areas is needed.

g. Greater integration of HILS drill material and regular classroom subject matter is needed.

h. Chronic problem readers who are not responding to HILS need an independent component or program.

i. For purposes of reliability and validity, reading pre-tests should be administered no later than October 1st of the academic year.

j. Emphasis should be placed on vocabulary and and word recognition skills as these tended to be the lowest sub-test area.

K. Statistics show that there is a high probability that participation in the program was significant

in improving the total reading and comprehension scores of the target children.

RECOMMENDATIONS

a. Program be recycled.

b. A revision of HILS to include:

1. Consolidation of instructional objectives and further simplication of the management system.

2. Expansion of the center teacher's role to include specific teaching lessons in traditionally difficult areas.

3. Greater integration of drill material into regular classroom content areas such as science, social studies and the humanities.

4. Creation of an independent component or program to meet the needs of students with chronic reading problems.

c. Reading pre-tests to be administered no later than mid-October, so that analysis of pre and post-test scores will more accurately reflect reading gains for the academic year.

d. Re-emphasis on vocabulary and word recognition skills.

B. High Intensity Reading and Think Programs in the Junior High Schools

1. Description

a. High Intensity Reading Program

The HILS Reading Program in the junior high schools was attended only by target students. The system is designed in the same manner as in the elementary schools except that it includes only the higher level reading material and is operated by a center teacher and one para-professional. There was no use of the "Systems 80" equipment and there was more emphasis on reading comprehension. 2,077 students were serviced in the junior high schools.

b. Think

The Think Program is published by Innovative Sciences Incorporated. The evaluation design of THINK is based on the following objectives:

-- To increase overall student achievement in reading

-- To ensure mastery of decoding skills

-- To ensure growth in reading comprehension

THINK is designed for improving the language and intellectual capabilities of the underachieving students of junior high school age. It combines the teaching of basic content skills such as phonics, vocabulary, grammar, word usage and reading comprehension with the development of thinking processes or cognitive skills.

There are two components to the THINK Program. The Developmental Reading Component utilizes traditional reading materials to teach grammar, word usage, vocabulary and comprehension skills, by stressing the cognitive skills of classification, sequencing, making analogies, structure analysis, operational analysis, and the ability to draw conclusions. The Language Analysis or Laboratory Component is an audio tape program that provides students with an individualized phonics program based on the diagnostic-prescriptive approach to reading. Language Analysis consists of 123 audio tape lessons on 62 cassettes designed for individualized instruction and drill. Each of the 123 drills is 12 to 15 minutes in length and 90% self-instructional and 90% self-correcting. The drills are designed to be repeated until mastered to specifications.

The following depicts the utilization of the THINK and HILS in the four junior high schools:

SCHOOLS	HILS	THINK
JHS 13	3 Centers	5 Centers
JHS 45	4 Centers	2 Centers
JHS 99	1 Center	3 Centers

2. Evaluation Procedures

The Evaluation of HILS Reading and THINK and GERIS Programs were based on findings from:

-- Center & classroom observations

-- Interviews with principals, coordinators,

teachers, paraprofessionals and students.

-- Questionnaires from center teachers, paraprofessionals (except GERIS).

__ Pre-post test results.

HILS Reading Program students pre and post-test scores in reading were evaluated using the Historical Regression formula and then a correlated t-test using the Predicted Post Test Scores (PPTS) means and the actual post-test means. The level of significance for program success was the .05 level.

THINK Program students pre and post-test scores in reading were evaluated using the Historical Regression formula which predicts mean growth for disadvantaged learners and then a t-statistic correlated to the actual post-test scores was used to evaluate the program growth above the PPTS, significance at the .05 level or better would be considered as a success criterion and the determination that program intervention and not mere chance caused the improved reading scores.

3. Findings from Observations, Interviews and Questionnaires

a. High Intensity Reading Program

The HILS Reading Centers in the junior high schools were organized to emphasize reading comprehension. Management charts were prominently displayed by the designated areas of games, poetry, and audio were often absent.

Center teachers tended to eliminate aspects of the program that students complained were boring or too juvenile. Most of the emphasis was on reading complete books and book conferences. The atmosphere was relaxed and less formal than in the elementary schools. Students were often free to walk around, ask questions and use their own initiative while in the center.

The center teachers and paraprofessionals offered the following reasons for the above adjustments in the center:

-- Only one para per center
-- Many of the students had been in the HILS Reading Program for four or five years and the system was in danger of becoming too routinized for them.
-- Many students were not chronically retarded readers and needed more flexibility.
-- Students at this age are beginning puberty and tend to respond better to less structure.
-- Much of the HILS reading materials is geared to the mentality of a younger student.

The more relaxed and less structured application of the HILS Reading Program seemed to be more appropriate in light of the above conditions.

Principals, center teachers and paraprofessionals

all indicated that the addition of more current and relevant material would greatly increase the motivational level of the students and further increase already marked reading gains. The junior high school students in the program may have third or fourth grade reading levels, but they need material that is interesting to 11, 12 and 13 year old adolescents. This need for additional and more sophisticated material is intensified by the fact that secondary school students have already been exposed to the existing material several times.

b. THINK

The two components of THINK were uniformly taught in the same center and by the same teacher except in JHS 45. In JHS 45, the language analysis component was taught by the HILS Center teacher while developmental reading was taught by sixteen different teachers in a regular classroom.

Many of the problems that plagued the THINK centers the previous year had been solved. All centers were adequately equipped with electrical outlets, tape players/recorders, tapes, response sheets, developmental reading materials, student progress records, mini-quizzes, answer keys and dictionaries. In addition the center teachers and paraprofessionals were more familiar with the program.

The Innovative Sciences staff did an excellent

job training the teachers and paraprofessionals in the THINK system. The centers ran smoothly and each teacher and para felt well equipped to handle his role in the program. New and replacement materials were delivered promptly.

The variety of working with individual tapes and working in a group with reading development was very appealing to the students. They were motivated by the sense of accomplishment they received in the language analysis component and the interaction that accompanies the developmental reading. Several teachers and students suggested integrating the reading material to include social studies, science, humanities and other traditional school topics. Some students were able to use the recorders to tape over the intended lessons. New equipment should include only tape players and tapes that cannot be erased.

The individual tape lessons in the language analysis component are clear and concise. Each lesson is appropriated in length and depth. The students do not get bored with the lessons the first time through. However, there is no alternate tape program and, if a student fails to successfully complete a lesson, he must repeat that lesson. In some cases the student memorizes the answer pattern. Several students and teachers suggested alternate tapes for about a dozen of the most

difficult lessons. Aside from the problem of repeating lessons, the teachers, paraprofessionals and students felt the language analysis component is a highly motivating and effective system.

The developmental reading component was held by the center teacher in one half of the room while the paraprofessional supervised the language analysis. There was no interference between the two activities and the teacher could handle difficult problems in the language analysis area should they arise.

The developmental reading component is more flexible in structure than language analysis. Center teachers used this opportunity to teach speaking and writing skills as well as traditional reading skills. For example, teachers were creative by requesting students to write down their arguments or reasons on certain controversial issues and then present them in a group discussion format. This provided a relevant context for writing, organizational and speaking skills. Initially students seem to enjoy the language analysis component more because of the opportunity to work with the audio equipment. However, the developmental reading component became increasingly more popular during the school year.

Questionnaires administered to the teachers and paras indicated a high degree of satisfaction with

the THINK program. Responders felt the students were motivated and learning a great deal from their participation. The logic, comprehension and analogies aspects of the process were singled out as particularly effective. Responders also commented on how the two components, language analysis and developmental reading, blended well while keeping the format varied and interesting. It was also pointed out that the system allowed for individual problem areas for individual students would be easily identified.

In summary, the THINK program operated much more efficiently this year. Centers were properly equipped with electrical outlets and materials and teachers and paraprofessionals were familiar with the program.

4. Pre-Post Test Findings Grades 7-9

a. HILS - Table 7

Grade 7

The seventh grade students reflected the progressive retardation of disadvantaged students. Their pretest mean showed them more than two and one-half years below grade level as a group in reading. While in the program these target students were able to gain six grade equivalent months. Their predicted growth had they not been in the program was four months. This increased gain was significant on the .05 level which

is our success criterion. This means that the increased gain could only happen five times in a hundred by chance.

The growth was reflected on the comprehension subtest as well. Their predicted growth was again four months but the group with the aid of the program gained eight months. This gain was significant at the .005 level which says that the gain could only happen by chance five times in one thousand. The increased emphasis or comprehension within the program appears to have assisted these target seventh graders.

Grade 8

The pre-test mean for this group showed them at three years below grade level in reading. Due to the show progress this group had been making, their predicted growth was three and one-half months. The actual gain of this group was just under four months which is not significant.

On the comprehension subtest the group's predicted gain and actual gain were the same and therefore, not significant which means that for these eighth graders the program did not help them significantly to overcome their slow progress.

Grade 9

This group, further behind than any group in

the program, was more than three and one-half years retarded in reading. Their predicted gain without special program help was a little over three months. The group actually gained three and one-half months which again is not significant. In this grade, these target students did not reach their predicted level on the comprehension subtest and more analysis and help is necessary for this group of students.

Composite Findings - High Intensity Reading Program

Grades 7, 8, 9

Only the seventh grade was able to make significant gains with the help of the program in both total reading and comprehension, while the ninth grade on the comprehension subtest failed to gain at least the number of months predicted.

It can be noted that on the junior high school level, the comprehension pre-test and post-test scores were higher than the respective total reading means. This could suggest greater emphasis in the vocabulary area.

TABLE 7

HISTORICAL REGRESSION ANALYSIS SUMMARY

HIGH INTENSITY READING PROGRAM

GRADES 7, 8, 9, - TOTAL READING & COMPREHENSION

GRADE		PRE-TEST MEAN	PREDICTED MEAN	POST-TEST MEAN	t-VALUE	p-VALUE	N
7	TOTAL READING	4.48	4.83	5.05	1.97	.05	326
	COMPREHENSION	4.75	5.13	5.60	4.94	.005	
8	TOTAL READING	5.22	5.58	5.71	0.14	NS	372
	COMPREHENSION	5.54	5.93	5.54	0.00	NS	
9	TOTAL READING	5.35	5.68	5.93	0.20	NS	99
	COMPREHENSION	5.95	6.32	6.07	-2.15	NS	

b. THINK - Table 8

Grade 7

These seventh graders had a pre-test mean more than two and one-half years below grade level in total reading and just a little better on the comprehension subtest. They were predicted to gain better than three months in each if they were not in any special program.

In reality they gained five months in both their total reading and comprehension scores which is significant at better than the .05 level. Chances are that it was program assistance that helped cause the greater gain.

Grade 8

Here these target eighth graders were more than three years behind in total reading and just under three years behind on the comprehension subtest. Although they gained a month more than was predicted for total reading, the gain was significant only at the .10 level which is above our success criterion of .05 and therefore, deemed not significant.

In the comprehension subtest this group did make a significant gain at the .05 level, and the program emphasis on comprehension appears to have succeeded at this grade level.

Grade 9

This grade started more than three years below grade level in both total reading and comprehension. In the six months between pre- and post-testing, these students made very little progress only making up half of the predicted four months growth had they not been part of the program.

More treatment and investigation is needed for this group of ninth graders.

Composite Findings - THINK - Junior High Schools

The seventh grade showed the greatest statistical gain, significant at better than the .05 level. The eighth grade made a significant gain in comprehension and gained more than predicted in total reading although it was not a statistically significant gain. The ninth grade did poorly and more treatment and investigation is necessary.

It can be noted here as it was with High Intensity that the pre-test and post-test means on the comprehension subtest were greater than those on total reading. This could suggest greater emphasis in teaching vocabulary.

TABLE 8

HISTORICAL REGRESSION ANALYSIS SUMMARY

THINK

GRADES 7, 8, 9, - TOTAL READING & COMPREHENSION

GRADE		PRE-TEST MEAN	PREDICTED MEAN	POST-TEST MEAN	t-VALUE	p-VALUE	N
7	TOTAL READING	4.36	4.70	2.86	2.51	.05	444
	COMPREHENSION	4.73	5.05	5.23	2.56	.05	
8	TOTAL READING	4.84	5.17	5.26	1.34	.10	409
	COMPREHENSION	5.16	5.51	5.68	2.13	.0	
9	TOTAL READING	5.61	6.01	5.79	-2.33	N.S.	223
	COMPREHENSION	5.97	6.39	6.05	-3.21	N.S.	

5. CONCLUSIONS

a. HILS

1. All HILS Reading Centers adhered to the specifications of the program in terms of learning environment and operational procedures.
2. Professional relationships between center teachers and paraprofessionals were excellent.
3. Rapport between paraprofessionals and students was excellent.
4. The system is too management oriented with superfluous instructional objectives and record keeping.
5. Teaching component in traditionally difficult areas is needed.
6. Greater integration of HILS drill material and regular classroom subject matter is needed.
7. Chronic problem readers who are not responding to HILS need an independent component or program.
8. For purpose of reliability and validity reading, pre-tests should be administered no later than October 1st of the academic year.
9. Statistics indicate that there is a high

probability that participation in the HILS for seventh graders program was significant in improving the total reading scores of the target students.

10. Re-emphasis should be placed on vocabulary and word recognition skills.

b. THINK

1. All THINK Centers adhered to the specifications of the program in terms of learning environment and operational procedures.
2. Students were highly motivated by the audio tapes in the language analysis component as well as the activities in the language analysis component as well as the activities in the developmental reading component.
3. Audio equipment should include only tape players and tapes that cannot be recorded over.
4. Professional relationships between teachers and paras were excellent.
5. Integration of reading material that relates to traditional classroom areas such as social studies, science and the humanities into the developmental reading component is needed.

6. For the purposes of reliability and validity reading pre-tests should be administered no later than October 1st of the academic year.
7. Statistics indicate that there is a high probability that participation in THINK was responsible for improving the total reading scores of the target students.

6. Recommendations

a. HILS

1. Program be recycled.
2. A revision of HILS to include:
   a) Consolidation of instruction objectives and further simplification of the management system.
   b) Expansion of the center teacher's role to include specific teaching lessons in traditionally difficult areas.
   c) Greater integration of drill material into regular classroom content areas such as science, social studies and the humanities.
   d) Creation of an independent component or program to meet the needs of students with chronic reading problems.

e) Re-emphasis be placed on vocabulary and word recognition skills.

3. Reading pre-tests to be administered no later than October 1st, so that analysis of pre and post-test scores will more accurately reflect reading gains for the academic year.

b. THINK

1. Program be recycled.
2. New audio equipment should include only tape players and tapes that cannot be recorded over.
3. An alternate tape program with appropriate exercises and tests has become more necessary as some students begin their second or third year in the system.
4. Regular classroom content areas such as science, social studies and the humanities should be integrated into the developmental reading component.

C. Non-Public Schools Reading, Mathematics and English As A Second Language Program

1. Program Description

a. Reading and Mathematics (39-81653)

There were six non-public schools serviced with Title I funds. They were staffed by thirteen (13) educa-

tional assistants/teacher aides and one coordinator. The educational assistants/teacher aides worked under direct supervision of Title I centrally funded Board of Education teachers and coordinator of the District's Non-Public Title I Program.

According to program specifications students were eligible to participate in the programs of remedial reading and/or remedial mathematics if they were one year or more below grade level.

The paraprofessionals assisted the centrally funded teachers with educational and clerical tasks. They worked with target children in small groups of 2-5 at a time. The target children participated in the program on a weekly basis. Frequency varied according to the program. Some children received assistance two or three one hour periods weekly while some participated daily (see Chart 2). The reading program consisted of a reading skills center similar to the High Intensity Centers in the public schools. They contained many of the same materials and focused on diagnosing specific reading problems. The classes were kept small so the classroom teacher and paraprofessional could maintain 1:3, 1:4 or 1:5 ratios with the students.

The remedial mathematics program was similar to the reading program in that small groups were taught

by the teacher and the paraprofessional.

b. English As A Second Language (ESL)

This program operated in three of the six non-public schools (see Chart 3). Four educational assistants/ teacher aides assist the centrally funded Title I teachers.

The emphasis was on the primary grades K-4 although several upper grade pupils were participants. The paraprofessional works with small groups under the direction of the teacher. The ratio was approximately 1:3. Students were serviced two or three times a week for one hour periods. Occasionally, students were serviced more frequently and/or on an individual basis.

The program utilized audio tapes, where the student listens, responds and then hears himself. The program also used group participation conversation excercises.

2. Evaluation Procedures

For both programs, the non-public school co-ordinator participated in the on-going training of the paraprofessionals by conducting in-service workshops and conferences.

She also maintained close communication with non-public school administration and staff as well as District Title I staff and evaluators. Target pupil

lists and records were kept by the coordinator.

These components were evaluated on the basis of data derived from:

-- on site observations;

-- interviews with principals, teachers, paraprofessionals and students;

-- interviews with, and records supplied by, the coordinator;

-- analysis of pre- and post-tests.

As described in the evaluation design, the New York State Education Department approved Historical Regression Technique which was used to obtain a Predicted Post-Test Score (PPTS) in order to perform a t-ratio correlation with the actual post-Test scores. It was stated that the program's participants would demonstrate statistically significant pre-post means gains at the P____.05 level.

CHART 2 - READING & MATHEMATICS (R/M)

SCHOOL	TARGET (R/M)	PARAS (R/M)	GRADES (R/M)
St. Ann	40/40	1/1	2-8/5-8
St. Cecilia	99/100	1/1	2-8/3-8
St. Lucy	60/40	1/1	2-6/2-8
St. Paul	25/	1	3-8
Holy Rosary	52/40	1/1	2-7/2-5
Our Lady Queen of Angels	75/96	1/1	2-8/2-8

CHART 3 - ESL

SCHOOL	TARGETS	PARAPROFESSIONALS
St. Cecilia	42	1
St. Paul	57	1
Our Lady Queen of Angels	46	1

3. Findings From Observations and Interviews

The rapport between the paraprofessionals and the target students was excellent. The paraprofessionals assisted with instruction, reviewed material and taught the students individually and in small groups. They also helped with clerical work such as record keeping, making stencils, taking attendance and keeping materials in their proper places.

The paraprofessionals were particularly effective in situations where Hispanic students were having problems. The students appeared comfortable with the paras who often live in their neighborhood and know their families. As the paraprofessionals often speak Spanish as well, they provide an excellent liaison between school and community.

The rapport between the teacher and the paraprofessional was generally excellent. They worked well together and the teachers demonstrated a willingness to provide help in all cases. The administrators at the non-public schools have praised the work of the para-

professionals, and they are interested in keeping the programs within their schools.

The programs' coordinator has taken steps to ensure an effective and smooth running program. Some steps taken by the coordinator to maximize the effectiveness of the paraprofessionals in the program were:

-- An initial orientation session for all paraprofessionals.
-- Workshops at various schools and at the District Office. These were two hour sessions on skill techniques in teaching reading, mathematics and ESL as well as record keeping and classroom management. Approximately thirteen (13) sessions were held during the past year.
-- Regular evaluation of the paras at least twice each year (see Appendix VII). After observation, the coordinator provided feedback in the form of guidance.
-- Regular meetings with the paraprofessionals and their program teachers. This fostered good relationships and helped iron out any problems.
-- Certificates issued for excellent performance.

4. Pre- and Post-Test Findings

a. Reading Program - Table 9

Grade Two

The 41 target children exceeded their predicted mean growth by 2 months. This was statistically significant at the .005 level which more than meets our program success criterion of .05. This states that the gains made could have happened by chance only five times in one thousand. There is a high probability that program participation caused the gain.

Grade Three

The third graders as a whole gained six grade equivalent months in reading but this was one month less than predicted and therefore, the gains were not statistically significant. These students were close to grade level (2.6) when the semester began and they should have gained close to one month for each month in the program.

Grade Four

The 57 targets in the fourth grade did well. They were a year behind (3.0) when the semester began, and they gained eight grade equivalent months in reading. This was three months better than predicted and significant at the .005 level again more than meeting the success criterion.

Grade Five

The fifth grade targets had a very low reading level to begin the term (2.7). This was more than two years below grade level. They gained while on the program, more than one year and four months and this was highly significant (P___.0005). There is a very strong possibility that program intervention was the cause of this great gain. Only 5 times in 10 thousand could these gains have occurred by chance.

Grade Six

The students were almost three years below grade level at the start of the year (3.1). Their gain of one year, nine months is exceptional and highly significant. They excelled their predicted gain by a year and one-half.

Grade Seven

The seventh grade targets continued to be helped by the program. Their gain of one year, seven months exceeded their predicted score by over a year, and the gains were significant at the .0005 level. It is highly probable that participation in the program helped the children make these great gains in reading.

Grade Eight

The eight grade targets made the greatest gain of all. They went from a pre-test of 4.6 to a post-test mean of 7.1, a gain of almost two and one-half years.

This was highly significant statistically and again the chances are that program support has helped the targets with these exceptional gains.

COMPOSITE FINDINGS

At each grade level, except the third, the target students made significant gains probably due to participation in the remedial reading program.

The third grade targets started very close to grade level and although they made gains, these were not significant.

The substantial gains of the fifth through eighth grades could signify that with the help of program participation, the progressive retardation evidenced prior to participation might be reversed.

TABLE 9

HISTORICAL REGRESSION ANALYSIS SUMMARY

READING - NON-PUBLIC SCHOOLS

GRADES - 2,3,4,5,6,7,8

GRADE	N	PRE-TEST MEAN	PREDICTED MEAN	POST-TEST MEAN	t-VALUE	p-VALUE
2	41	1.6	2.0	2.2	2.60	.005
3	58	2.6	3.3	3.2	-2.15	N.S.
4	57	3.0	3.5	3.8	3.18	.005
5	63	2.7	3.0	4.1	8.14	.0005
6	55	3.1	3.4	5.0	8.58	.0005
7	44	4.5	5.0	6.2	6.14	.0005
8	19	4.6	5.0	7.1	6.07	.0005

b. Mathematics Program - Table 10

Grade Two

The thirty second grade targets had a pre-test mean of 1.3 and their predicted gain based on their history was three months. With the help of the program, they actually gained over one year. This was significant at the .0005 level and above our success criterion of .05.

Grade Three

These targets were more than one year below grade level (2.0) at the start of the year. They gained nine months while in the program. This was 4 months greater than predicted, and the gains were statistically significant at the .005 level. This means that only 5 times in one thousand could these gains have come about by chance.

Grade Four

This group was also more than one year below grade level (2.7), and it was predicted that if they continued without program assistance, they would gain four grade equivalent months. Their post-test mean of 3.9 showed a gain of one year, two months and is highly significant at the .0005 level.

Grade Five

The fifth grade also gained more than one year during participation in the remedial math program. They

exceeded their predicted gain by more than five months. This was statiscally significant at the .0005 level, and it is highly probable that program participation helped caused the gains.

Grade Six

These sixth grade target students started more than one and one-half years below grade level in mathematics (4.4). Their gain of eight grade equivalent months was three months greater than predicted and significant at the .005 level.

Grade Seven

Although starting more than two years below grade level (4.6) these seventh grade targets gained almost one and one-half years in mathematics. This dramatic gain was significant at better than the .0005 level. Only 5 times in ten thousand could these gains have happened by chance and there is an extremely high probability that program participation helped cause the gain.

Grade Eight

Starting at over two and one-half years below grade level in mathematics, this target group gained one year and three months which was eight months more than was predicted based on their history. This was significant at the .0005 level and more than meets our success criterion.

COMPOSITE FINDINGS

This target group of over three hundred target students in grades 2-8 made consistent gains greater than predicted. Most gained more than a year where previously, they were gaining four to five months a year. The gains were statistically significant at each grade level at a higher level than our success criterion of .05.

This is a great probability at each grade level that participation in the remedial mathematics program was a factor on the grade equivalent gains made by these targets.

TABLE 10

HISTORICAL REGRESSION ANALYSIS SUMMARY

MATHEMATICS - NON-PUBLIC SCHOOLS

GRADES 2,3,4,5,6,7,8

GRADE	N	PRE-TEST MEAN	PREDICTED MEAN	POST-TEST MEAN	t-VALUE	p-VALUE
2	30	1.3	1.6	2.4	6.85	.0005
3	45	2.0	2.5	2.9	2.84	.005
4	57	2.7	3.1	3.9	9.27	.0005
5	60	3.7	4.3	4.8	5.64	.0005
6	47	4.4	4.9	5.2	3.70	.005
7	42	4.6	5.1	6.0	7.20	.0005
8	30	5.4	5.9	6.7	5.33	.0005

c. English As A Second Language Program - Table 11

The statistical evaluation for the ESL component used, the difference between pre- and post-test scores using the correlated t-test technique for grades K, 1, and 2 and the Historical Regression Analysis for grades 3 and 4.

Many of the scores for K, 1, and 2 targets were below the 1.0 grade level and the Historical Regression technique could not be used.

Program success will again be measured at the .05 significance level.

Grade Kindergarten

This young target group was tested with a visual and auditory exam. (Test of Basic Experiences) and their mean (raw score) was a low 6.4. Their raw score gain to 17.1 was significant at the .0005 level.

Grade One

These target first graders were also tested using the TOBE, and they also had a low pre-test mean of 12.3 (raw scores). The overall gain of these 61 targets to 21.0 was also significant at the .0005 level.

Grade Two

These children were tested using the Stanford and their scores were reported in grade equivalent. Their pre-test mean was K.8 and they were more than a year below

grade level. Their post-test mean of 1.5 was highly significant at the .0005 level which means that the chances that this could have happened without special program assistance was 5 times in 10,000.

Grade Three

These targets were more than one and one-half years below grade level as a group at the start of the year. Due to their previous slow progress, their gain was six months greater than predicted and significant at the .005 level.

Grade Four

Starting more than two years behind, these students gained nine months during the school year. Due to their previous extremely slow progress, this gain was highly significant at the .0005 level, again pointing to program participation as a prime cause for the improvement.

COMPOSITE FINDINGS

Every grade level made significant gains, most notable were in the second and third grades which had the most participants (61 and 33 respectively).

The gains increased as the grade incrased. It appears that as the child gets older, his facility with a second language improves, and they appear to make better use of the program.

The statistically significant gains at each g grade level make it highly probable that program intervention and not pure chance helped these children to improve.

5. Conclusions

   a. The program specifications were met in all parts.

   b. The teachers and paraprofessionals were effective in providing small group instruction.

   c. Paraprofessionals training by the coordinator and teachers was very beneficial.

6. Recommendations

   a. Programs to be recycled.

   b. Position of non-public school coordinator to be maintained.

   c. Training sessions for the paraprofessionals to be continued with emphasis on:

      -- Reading--language skills

      -- Mathematics--foundations

      -- ESL--oral language skills.

APPENDICES

I. High Intensity Reading Program Center Observation Checklist

II. Think Program Center Observation Checklist

III. Junior High School High Intensity Reading Program Teacher Questionnaire

IV. Junior High School High Intensity Reading Program Paraprofessional Questionnaire

V. Junior High School Think Teacher and Paraprofessional Questionnaire

VI. Historical Regression Design

VII. Classroom Observation Checklist - Non-Public Schools

TABLE 11

PRE-POST TEST ANALYSIS FOR GRADES K,1,2, AND

HISTORICAL REGRESSION ANALYSIS - GRADES 3 AND 4

ENGLISH AS A SECOND LANGUAGE - NON-PUBLIC SCHOOLS

GRADE	N	PRE-TEST MEAN	PREDICTED MEAN	POST-TEST MEAN	t-VALUE	p-VALUE
*K	15	6.4		17.1	9.35	.0005
*1	61	12.3		21.0	19.54	.0005
2	33	K.8		1.5	11.93	.0005
3	16	1.4	1.5	2.1	3.56	.005
4	13	1.7	1.8	2.6	5.50	.0005

*Raw Scores for Grades K and 1

APPENDIX I

HIGH INTENSITY READING PROGRAM - DISTRICT 4

CENTER OBSERVATION

DATE _____ SCHOOL _____ CENTER _____

GRADES _____ TIME _____

TEACHER _____ PRINCIPAL _____

PARAS _____ _____

_____ _____

_____ _____

OBSERVER _____

NUMBER OF STUDENTS _____.

I. PROGRAM

Check items inspected

_____Pupil List

_____Student Record Form (Student Work Folders)

_____Classroom Management Wall Chart

_____Progress Plotters

_____Check-in/Check-out Tests

_____Para-Pupil Ration 1:4 (Average)

_____Attendance Records

_____Prescription Catalogue with Objectives

II. LESSON

Type (Book Conference, Oral Reading, Other)_____

Conducted by_____

Number of Students_____

Subject of Lesson: Word Study_____ Comprehension_____

Vocabulary_____ Study Skills_____

Mini-Tests_____

DISCUSS:

Student Reaction_____

Teaching Techniques_____

Objectives Realized_____

Program Deviation_____

Reward System_____

III. ROOM

Check Areas

Audio (Tape Recorders, Headsets) _____

Workbooks _____ Reading Corner _____

Kits (SRA, etc.) _____ Poetry Corner _____

DISCUSS:

General Atmosphere _____

Decorations (Wall Charts, Book Conference Sign-Up, Directory, etc.)

_____

_____

Space _____

IV. EQUIPMENT AND SUPPLIES

Check Adequacy and Condition

Supplies _____

Equipment _____

Storage _____

COMMENTS: _____

_____

_____

V. TEACHER-PARA-STUDENT INTERACTION

DISCUSS:

Interrelationships _____

How Does Center Teacher Carry Out His/Her Duties _____

_____

How Does Para Carry Out His/Her Duties _____

_____

Are Students Self-Motivated (Are They Bored?)_____

_____

Classroom Management_____

Treatment of Individual Differences_____

Tax Levy Teachers Working with Non-Target Children_____

_____

VI. GENERAL

Check Students Progress and Number of Books Read from Folder

What do students like best_____

least_____

Lessons Plans used by paras_____

by teachers_____

General Reactions of Observer_____

COMMUNITY
SUPERINTENDENT
Mr. Anthony Alvarado
SUPERINTENDENTE
COMUNAL

APPENDIX II

THINK PROGRAM - DISTRICT 4

CENTER OBSERVATION

DATE _____ SCHOOL _____

GRADES _____ TIME _____

TEACHER _____

PARAS _____

_____

OBSERVER _____

NUMBER OF STUDENTS _____

BOARD OF EDUCATION
346 EAST 117th STREET/NEW YORK, NEW YORK 10035
(212) 860-5858

I. PROGRAM

Check Items Inspected

_____1 set of Developmental Reading Tapes (45 Lessons)

_____Adequate Developmental Reading Books in Number and Level

_____Teacher's Guides

_____Adequate Mini-Quizzes

_____Student Folders

_____Adequate Number of Language Analysis Tape Sets (62 Tapes - 123 Lessons)

_____Adequate Number of Response Sheets

_____Student Progress Records

_____Answer Keys (2)

_____Dictionaries

II. EQUIPMENT AND SUPPLIES

Tape Recorders:

Headphones:

Electrical Wall Outlets:

Desks:

Storage

Supplies:

COMMENTS: _____

_____

_____

III. CLASSROOM ENVIRONMENT

Wall and Room Decorations:

Space:

General Atmosphere:

IV. LESSON WORK AND STUDENT REACTION

Are Students Properly Placed:

Coordination Between Developmental Reading and Language Analysis:

Quality of Tape Transcriptions:

Clarity of Transcriptions:

Easy for Student to Follow and Understand:

Student Able to Complete Drills:

How Often Does Student Attend: _____ Times Per Week

_____ Periods Per Day

Who Is Eligible:

_____Pupils in Class

_____Teachers in Class

_____Paraprofessionals in Class

Are Tape Lessons Sequenced and Spaced Properly:

Are Quick Checks and Mini-Quizzes Properly Spaced:

Is Redoing Drills and Tape Lessons Effective:

Student Reaction:

To Program:

To Teacher:

To Paraprofessional:

What Do Students Like Most:

What Do Students Like Least:

How Are Students Progressing:

General Comments:

V. TEACHER-PARA-STUDENT INTERACTION

DISCUSS:

Student-Para Relationships:

Student-Teacher Relationships:

Teacher-Para Relationships:

Major Roles of Teacher:

Major Roles of Para:

COMMENTS: _____

_____

_____

IV. GENERAL OBSERVATIONS

Is Teacher Properly Trained:

Is Para Properly Trained:

Conferences, Workshops and Seminars Attended:

Motivation of Teacher:

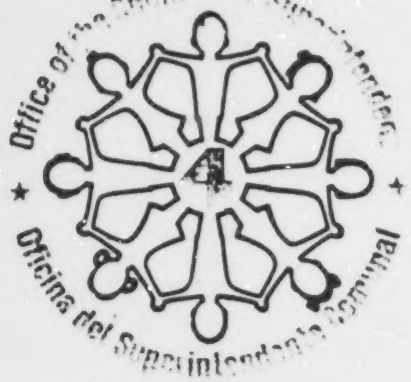
Motivation of Para:

Student Interest and Motivations:

Program Deviations and Innovations:

Reward System:

General Reactions of Observer:



COMMUNITY
SUPERINTENDENT
Mr. Anthony Alvarado
SUPERINTENDENTE
COMUNAL

APPENDIX III

April 4, 1978

Dear Teacher:

The answers to this questionnaire will be very helpful in the overall evaluation of the Title I High Intensity Reading Program.

Our purpose is to make recommendations for next year's program. We are very interested in your input as you are the person who must deal with the program on a day to day basis.

Please answer all the questions that you feel are relevant. Use as much space as necessary and make any additions that are needed.

There is no need to sign the questionnaire. We are interested in your ideas for purposes of program improvement and update.

After you have finished the questionnaire, please enclose it in the envelope provided and send it to the District Office. It's been a pleasure working with you.

Thank you,

Ted Hurwitz
Robert Fox
Title I Evaluators

BOARD OF EDUCATION
346 EAST 117th STREET/NEW YORK, NEW YORK 10035
(212) 860-5858

HIGH INTENSITY READING PROGRAM

TEACHER QUESTIONNAIRE

1. Which of the areas of the System (Audio, Games, Kits, Poetry, Reading, Workbooks) have you found most effective?

_____

_____

_____

_____

2. Which areas of the System have you found least effective?

_____

_____

_____

_____

3. Which areas or components do you feel should be deleted from future programs?

_____

_____

_____

_____

4. How successful is the program in effecting the following attitudinal outcomes? Please rank from 1-7 (1 is most successful; 7 is least successful).

_____improves child's self-image

_____develops good work habits

_____fosters added interest in reading

_____improves student-student relationships

_____improves student-para relationships

_____improves student-teacher relationships

_____improves student independence

5. Which components are most appealing to the students?

_____

_____

_____

_____

6. What are the student's major complaints?

_____

_____

_____

_____

7. How do the students appear to respond toward the program? Check one.

_____Uninterested _____Interested

_____Bored _____Very interested and stimulated

8. In your opinion, are the students in the program being serviced properly according to their needs?

_____Yes _____No

Comment: _____

_____

_____

_____

9. How is the paraprofessional a benefit to the program?

_____

_____

_____

_____

10. What are your suggestions for handling severe reading and discipline problems?

_____

_____

_____

_____

11. In what way can the paraprofessional be made more effective?

_____

_____

_____

_____

12. How often does the paraprofessional discuss individual students progress with you?

_____

_____

_____

_____

13. Being realistic about cost, what do you think would be the ideal para/pupil ratio?

_____

_____

_____

14. Do you make use of students previous year's records?

_____Yes _____No

Comment: _____

_____

_____

_____

15. What supplies and/or equipment are lacking?

_____

_____

_____

_____

16. Have you received sufficient direction, supervision and assistance whenever needed?

_____Yes _____ No

Comment: _____

_____

_____

_____

17. Has the coordinator been available to you for special needs or problems?

_____Yes _____No

Comment: _____

_____

_____

_____

18. In what areas do you think you need further or new training?

_____

_____

_____

_____

19. Have you implemented any innovations that have proved successful?

_____

_____

_____

_____

20. How many years have you been teaching?

_____Yrs.

21. How many years have you been working with the High Intensity Reading Program (Include this year)?

_____Yrs.

22. Have you completed any college coursework in the Methodology of Teaching Reading (Include this year)?

_____Yes _____No

23. How and what would you suggest to improve the program for 1978-78?

_____

_____

_____

_____

COMMUNITY
SUPERINTENDENT
Mr. Anthony Alvarado
SUPERINTENDENTE
COMUNAL

APPENDIX IV

April 4, 1978

Dear Paraprofessional:

In our observations of the various High Intensity Reading Centers in the District, we have had the opportunity to meet many of you. We realize how important you are to the success of the program.

We are very interested in your ideas for improving the program for the next year. If you will fill out the answers to this questionnaire, it will be very helpful to us in our evaluation of the program.

There is no need to sign your name. We are interested in your ideas for program improvement and update.

Use as much space as you need for your answers and then enclose it in the envelope provided and send to the District Office. It's been a pleasure working with you.

Thank you,

Ted Hurwitz
Robert Fox
Title I Evaluators

BOARD OF EDUCATION
346 EAST 117th STREET/NEW YORK, NEW YORK 10035
(212) 860-5858

HIGH INTENSITY READING PROGRAM

PARAPROFESSIONAL QUESTIONNAIRE

1. In your opinion, are the students in the program being taught according to their needs?

_____Yes _____No

2. How do the students appear to respond to the program? Check One.

_____Uninterested _____Interested

3. Do you feel that you have been given adequate training in order to work in the Center?

_____Yes _____No

4. What parts of the program (Audio, Games, Kits, Poetry, Reading, Workbooks) have you found most effective?

_____

_____

_____

_____

5. What parts of the program have you found least effective?

_____

_____

_____

_____

6. What parts of the program do the students enjoy the most?

_____

_____

_____

_____

7. What are the students major complaints?

8. In what way do you feel you are most helpful to the students?

9. In what ways do you feel you could be more effective?

10. How do you get along with the Center teacher?

11. In what ways could this relationship be improved?

12. Have you tried anything new or different in the program that has worked?

13. In what ways can the program be improved?

14. What changes would you suggest in the program for the next year?

15. How often do you discuss individual students with the Center teacher?

16. Have you received sufficient direction, supervision and assistance whenever needed?

_____Yes _____No

17. Are there any parts of the High Intensity Program that you do not understand?

_____Yes _____No

Comment: _____

_____

_____

_____

18. The following questions relate to your duties:

How were your duties explained to you?

_____

_____

How many students in each class are you responsible for (average)?

_____

_____

Which of your duties do you like most?

_____

_____

Which do you like least?

_____

_____

19. What supplies and equipment do you need more of?

_____

_____

_____

20. How long have you been in this program (include this year)?

_____Yrs.

21. Have you taken any courses in the teaching of reading (include this year)?

_____Yes _____No

Mr. Anthony Alvarado
SUPERINTENDENTE
COMUNAL

APPENDIX V

April 4, 1978

Dear Teacher and Paraprofessional:

In our observations of the THINK Program in the District junior high schools, we have had the opportunity to meet most of you and discuss your work. We have found your insights and suggestions very helpful.

It is our goal to make the best possible recommendations for next year's program. You can be of help by answering the questions on the following pages.

There is no need to sign the questionnaire. We are interested only in your ideas for the purpose of program improvement.

After you have finished the questionnaire, please enclose it in the envelope provided and send it to the District Office.

It has been a pleasure working with you.

Thank you,

Ted Hurwitz
Robert Fox
Title I Evaluators

346 EAST 117th STREET/NEW YORK, NEW YORK 10035
(212) 860-5858

THINK PROGRAM QUESTIONNAIRE

Please Check One:

_____Teacher _____Paraprofessional

1. Are the Developmental Reading and Language Analysis components taught by the same teacher?

2. What are the most effective aspects of the Developmental Reading component?

   What are the least effective aspects?

3. What are the most effective aspects of the Language Analysis component?

4. Is there continuity between the two components?

5. Do students appear to be placed at the proper entry level?

6. Is the pace of the program appropriate to effect maximum student interest and learning?

7. In your opinion, are students in this program being serviced properly according to their needs?

8. How do students appear to respond to the program?

   _____Uninterested _____Interested

   _____Bored _____Very Interested and Stimulated

9. What aspect of this program is most appealing to the students?

10. What are the students' major complaints?

11. In your opinion, how effecitve has this program been in improving students' reading, thinking and communication skills?

12. Describe the training you received for the THINK program?

13. Was the training adequate?
How could it have been improved?

14. Are your rooms adequately wired electrically for the program?

15. Do you have adequate equipment and supplies?
(Players, Tapes, Worksheets, Quick Checks, etc.)
Comments: _____
_____
_____

16. In what ways do the paraprofessionals make their greatest contribution to this program.
_____
_____
_____

17. In what ways do the teachers make their greatest contributions to this program?
_____
_____
_____

18. In what ways could the teacher and paraprofessional be made more effective?
_____
_____

19. How effective is this program in dealing with students with severe reading problems?

_____

_____

_____

20. Have you implemented any innovations or modifications within the program that have proven successful?

_____

_____

_____

21. What suggestions can you offer to improve the effectiveness of this program for the future?

_____

_____

_____

22. How many years have you been a teacher or paraprofessions (include this year)?

_____Yrs.

23. How many years have you been working with the THINK Program (Include this year)?

_____Yrs.

APPENDIX VI

ANALYSIS OF THE BOND-SINGER HISTORICAL-REGRESSION DESIGN

Comparison of Actual Post-Test Scores
With Anticipated Post-Test Scores

In a September 1972 memorandum, Dr. Leo D. Doherty informed various community school boards that approval of their 1972-73 evaluation designs by the New York State Education Department, in part, was contingent upon their submission of a plan for data analysis according to the Bond-Singer Historical-Regression Design. This analysis was to be applied to all MAT data, as well as data from other standardized tests that yield grade-equivalent norms, at the second grade level and above. The analysis was to be conducted in the following manner:

Step 1 Obtain each pupil's pre-test grade-equivalent score.

Step 2 Subtract 1 from that score (since most standardized tests start with 1.0).

Step 3 Divide the figure obtained in Step 2 by the number of months the pupil has been in school. (Ignore Kindergarten months. One school year = 10 months) A hypothetical rate of growth per month (historical-regression) thus is obtained.

Step 4 Multiply the number of months of Title I treatment by the historical rate of growth per month.

Step 5 Add the figure obtained in Step 4 to the pupil's pre-test grade equivalent score (Step 1).

Step 6 Test for significance, with a correlated t-test, the difference between the predicted post-test mean and the

obtained post-test mean.

Essentially, the historical-regression design is an attempt at facilitating program analysis by the educational evaluator; it provides a much needed control group. In this case, the "expected" performance of the experimental group (program participants) serves as the control against which their actual expected performance is compared. If the actual performance significantly exceeds the expected performance, the Title I intervention is considered to have been successful.

In a typical experimental/control group design, the two groups are "equal" (assuming random selection and assignment), except for the fact that the experimental group is being manipulated by the independent variable (program of intervention) and the control group is not. In the historical-regression analysis, it is expected that the control group (an "imaginary" group) will continue to perform according to an established pattern of behavior, while the performance of the experimental group will be affected by the program of intervention. The presumption is that the only distinguishing variable is program participation. The extent ot which the anticipated performance of the "control group" is realistic would determine the legitimacy of this technique. In other words, if the performance prediction is accurate, the methodology is valid and highly acceptable. However, the assumptions upon which the behavioral predictions are based are questionable.

Historically, pupils of low socio-economic status (SES) families tend to gain less, and not constantly, from grade to grade. Experience has shown that, in the early schools years (Kindergarten through the third grade), the degree of reading retardation exhibited on testing of Title I eligible children is quite small. Of course, the amount of retardation exhibited in these early schools years is necessarily minimized by the group's proximity

to the lower limit of the test's grade-equivalent scores. In the later elementary school years, a more substantial pattern of retardation emerges. By the time the typical low SES pupil (serviced by Title I monies) has reached the secondary school level, his reading performance is often three or four years below the grade-equivalent norm established by the test publisher. In other words, the rate of regression dramatically increases as the child progresses through the grades.

The historical-regression design stipulates that the expected regression rate is equal to the average regression rate of the previous years. Since the actual regression rate of low SES pupils seems to increase from year to year, the expected regression rate, in fact, is too small. One would have to assume that the group's current rate of regression is equal to its historical average. However, the current rate of decline, typically, is greater than the average of the preceding years, since there is a continual movement downward toward a lower mean rate. Therefore, it seems unfair to expect the experimental group to perform significantly better than the predicted mean. In some instances, it may not even be reasonable to expect the actual and anticipated post-test means to be equal. If suitable allowances were made for the increasing rate of regression at higher grade levels, a more nearly accurate comparison base could be obtained.

Further, the previous growth of some pupils may have been affected by their prior participation in other special programs. (Often low SES children proceed from program to program.) One cannot easily assess the relative influence of these counteracting tendencies, but their probable existence cautions against any interpretation of data that is based only upon the use of anticipated post-test scores as quasi-control group measures.

Finally, the underlying assumption of a typical experimental/control group design is that both groups will be affected by similar environmental (historical) regression design. The history, as it were, for the control group, ends at the pre-test date; however, for the experimental group, time (and the changes that come with time) proceed. It does not seem justifiable to assume that historical varibles do not affect post-test performance. In fact, historical varibles may very well account for much of the variance in reading ability.

The rationale upon which the historical-regression design is predicated --a means of constructing a hypotehtical control group--most assuredly is valid, since appropriate control groups so often are unobtainable in educational research. However, as shown in the foregoing, this design is not a panacea for evaluative ills; it is merely an attempt at ameliorating some of the difficulties identified in earlier designs. And, with this realization as the given, it would seem grossly unfair to conclude that the merits of a program can be judged solely on the basis of whether or not program participants attained scores that showed statistically significant mean differences obtained via the historical-regression technique of analysis. Cautious interpretation and consolidation of these and other data (both quantitative and qualitative) seems necessary in the evaluation of the substantive effects of SUE-funded educational programs.

APPENDIX VII

CLASSROOM OBSERVATION CHECK LIST - NON-PUBLIC SCHOOLS

PROGRAM_____ SCHOOL_____

TEACHER_____

PARAPROFESSIONAL_____

DATE_____ TIME_____

GRADE_____ GROUP SIZE_____

Method of Instruction Observed

1. Group Teacher Oriented
2. Small Groups Teacher and Para
3. Individualized
4. Combination

TOPICS COVERED_____

_____

_____

COMMENTS _____

_____

_____